

Please add new Claims 28-59.

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--28. A method of modifying a polymeric material comprising the steps of (1) an activation-treatment and (2) a hydrophilic polymer-treatment.

29. The method of modifying a polymeric material according to claim 28 further comprising the step (3) of monomer grafting.

30. The method of modifying a polymeric material according to claim 28, further comprising the step of a solvent-treatment prior to step (1).

31. The method of modifying a polymeric material according to claim 30, further comprising the step (3) of monomer grafting.

32. The method according to claim 28, wherein said polymeric material is a homopolymer or copolymer of one or more compounds selected from the group consisting of: olefins, vinyl compounds except olefins, vinylidene compounds and other compounds having carbon-carbon double bonds; polyesters, polyamides, polyimides, polyurethanes, polybenzoates, poly(benzoxazole)s, poly(benzthiazole)s, poly-(*p*-phenylene benzbisoxazole)s, poly-(*p*-phenylene benzbis-thiazole)s, poly(alkyl-*p*-hydroxybenzoate)s, poly(benzimidazole)s, carbon fiber materials, polyphenols, cellulose acetate, regenerated cellulose, vinylon, polychlel, casein, wool, silk and hemp (or ramie, jute).

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33. The method according to claim 28, wherein said polymeric material is in the form of any one of fibers, woven fabrics, knitted webs, non-woven fabrics, plates, rods, films, sheets, porous films, sheets, members or products of molded materials in a given shape or composite materials with other materials.

34. The method according to claim 28, wherein said activation-treatment is at least one of the treatments selected from the group consisting of an ozone treatment, a plasma treatment, a UV irradiation treatment and a high voltage electric discharge treatment.

35. The method according to claim 28, wherein said hydrophilic polymer is at least one member selected from the group consisting of polyvinyl alcohol, carboxymethylcellulose, polyhydroxy ethylmethacrylate, poly- α -hydroxy vinylalcohol, polyacrylic acid, polyvinyl pyrrolidone, polyalkylene glycols, starche, silk fibroin, sericin, agar, gelatin, egg white and sodium arginate.

36. The method according to claim 29, wherein said monomer is a compound having a carbon-carbon double bond.

37. The method according to claim 31, wherein said monomer is a compound having a carbon-carbon double bond.

38. The method according to claim 36, wherein said monomer is at least one kind of monomer or a mixture of monomers selected from the following monomers; acrylic acid, methacrylic acid, vinyl acetate, 2-butene acid, ethylene sulfonic acid, hydroxyalkyl acrylate, hydroxyalkyl methacrylate, acryl amide, vinyl pyridine, vinyl pyrrolidone, vinyl carbazole, maleic anhydride and pyromellitic dianhydride.

39. The method according to claim 37, wherein said monomer is at least one kind of monomer or a mixture of monomers selected from the following monomers; acrylic acid, methacrylic acid, vinyl acetate, 2-butene acid, ethylene sulfonic acid, hydroxyalkyl acrylate, hydroxyalkyl methacrylate, acryl amide, vinyl pyridine, vinyl pyrrolidone, vinyl carbazole, maleic anhydride and pyromellitic dianhydride.

40. The method according to claim 28, wherein the step of a hydrophilic polymer-treatment is carried out in the presence of catalysts or initiators.

41. The method according to claim 29, wherein the step of monomer grafting is carried out in the presence of catalysts or initiators.

42. The method according to claim 29, wherein said step of monomer grafting is carried out by any one of or both of the following two methods: (1) heating in the presence of catalysts or initiators and (2) UV irradiation in the presence or absence of catalysts, initiators or photo-sensitizers.

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43. The method according to claim 31, wherein said step of monomer grafting is carried out by any one of or both of the following two methods: (1) heating in the presence of catalysts or initiators and (2) UV irradiation in the presence or absence of catalysts, initiators or photo-sensitizers.

44. The method according to claim 40, wherein said initiators are at least one compound selected from the following compounds: peroxides, cerium ammonium nitrate (IV) and persulfates.

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45. The method according to claim 41, wherein said initiators are at least one compound selected from the following compounds: peroxides, cerium ammonium nitrate (IV) and persulfates.

46. An improved polymeric material obtained by the improvement method according to claim 1.

47. Battery separators containing improved polymeric materials obtained by the improvement method according to claim 1.

48. Wiping/cleansing materials containing improved polymeric materials obtained by the improvement method according to claim 1.

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paper, pens erasers etc

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56. Medical/sanitary/cosmetic supplies containing improved polymeric materials obtained by the improvement method according to claim 1.

57. Synthetic papers made of improved polymeric materials obtained by the improvement method according to claim 1.

58. Brackets for straightening of irregular teeth containing improved polymeric materials obtained by the improvement method according to claim 1.

59. Textile products for clothing or inner battings of beds/bed clothing containing improved polymeric materials obtained by the improvement method according to claim 1.